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### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

International Patent Classification (IPC) or both national classification and IPC C07D471.04  Applicant NOVARTIS AG et al.  1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of 5 sheets, including this cover sheet.  □ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of 2 sheets.  3. This report contains indications relating to the following items:  □ □ Basis of the opinion □ □ Priority □ □ Basis of the opinion □ □ Priority □ □ Lack of unity of invention ∨ □ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement ∨ □ □ Certain documents cited ∨ □ □ Certain defects in the international application ∨ □ □ Certain defects in the international application □ Certain observations on the international application □ Date of submission of the demand □ Date of completion of this report □ 10.4.28 82.393 ∘ 0 ⊤x 52.3556 epmu d □ Schmild, A □ Schmild, A					
This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or of the Authority (see Fulle 70.16 and Section 90.70 the Administrative Instructions under the PCT).  This report contains indications relating to the following items:    Basis of the opinion     Priority			FOR FURTHER ACT	ION See Notification Preliminary Exa	n of Transmittal of International amination Report (Form PCT/IPEA/416)
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Authority and is transmitted to the applicant according to Article 96.  2. This REPORT consists of a total of 5 sheets, including this cover sheet.      This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).    These annexes consist of a total of 2 sheets.        Basis of the opinion		et al.			
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Basis of the opinion	i nese ani	Jexes consist of a total	or 2 Greeto.		
Basis of the opinion					
	3. This repo	rt contains indications r	elating to the following iter	ms:	-
III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  IV  Lack of unity of invention  V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  VI  Certain documents cited  VII  Certain defects in the international application  VIII  Certain observations on the international application  VIII  Date of submission of the demand  Date of completion of this report  21.05.2004  Name and mailing address of the international preliminary examining authority:  European Patent Office D-80/298 Munich  Tel. +49 89 2399 - 0 Tx: 523656 epmu d	. 1 🖾	Basis of the opinion			
V		Priority			
V		Non-establishment of	f opinion with regard to no	velty, inventive step	and industrial applicability
citations and explanations supporting such statement  VI	IV 🗆	Lack of unity of inver	ntion		
VII Certain defects in the international application VIII Certain observations on the international application  Date of submission of the demand  Date of completion of this report  21.05.2004  Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d	V ⊠	☑ Beasoned statement under Rule 66.2(a)(li) with regard to novelty, inventive step or industrial applicability;			
Date of submission of the demand  Date of submission of the demand  Date of completion of this report  21.05.2004  Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d	VI 🗆				
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21.05.2004  Name and malling address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d	VIII 🗆	Certain observations	on the international applic	cation	٠.
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O))) Tel. +49 89 2399 - 0 Tx: 523656 epmu d	European Patent Office			Schmid, A	
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#### INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

International application No.

PCT/EP 03/12851

I.	<b>Basis</b>	of the	report
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With regard to the elements of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):

	Desc	ription, Pages				
	1-30		as originally filed			
	1a		received on 29.11.2004 with letter of 26.11.2004			
	Clair	ns, Numbers				
	1-12,	13 (part)	as originally filed			
		art), 14-21	received on 29.11.2004 with letter of 26.11.2004			
2.	With lang	regard to the languag	ge, all the elements marked above were available or furnished to this Authority in the mational application was filed, unless otherwise indicated under this item.			
	Thes	ese elements were available or furnished to this Authority in the following language: , which is:				
		the language of a tran	slation furnished for the purposes of the international search (under Rule 23.1(b)).			
	П	the language of public	ation of the international application (under Rule 48.3(b)).			
		the language of a tran	slation furnished for the purposes of international preliminary examination (under			
		Rule 55.2 and/or 55.3	).			
3.	With inte	With regard to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application, the nternational application, the nternational preliminary examination was carried out on the basis of the sequence listing:				
		contained in the interi	national application in written form.			
		filed together with the	international application in computer readable form.			
			tly to this Authority in written form.			
		furnished subsequent	tly to this Authority in computer readable form.			
		The statement that the	ne subsequently furnished written sequence listing does not go beyond the disclosure polication as filed has been furnished.			
		The statement that the listing has been furni	ne information recorded in computer readable form is identical to the written sequence			
4	. The	e amendments have re	esulted in the cancellation of:			
		the description,	pages:			
		the claims,	Nos.:			
		the drawings,	sheets:			
5	i. П	been considered to	n established as if (some of) the amendments had not been made, since they have go beyond the disclosure as filed (Rule 70.2(c)).			
		(Any replacement sl report.)	heet containing such amendments must be referred to under item 1 and annexed to the			

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/12851

6.	Add	Additional observations, if necessary:				
111.	III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
1.	The obv	The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non- obvious), or to be industrially applicable have not been examined in respect of:				
		the entire international applica	tion,			
	×	claims Nos. 9-13				
		because:				
	Ø	the said international application does not require an internation	on, or t al prel	the said claim Iiminary exan	ns Nos. 9-13 relate to the following subject matter which nination (specify):	
	see separate sheet					
		the description, claims or draw that no meaningful opinion cou	rings <i>(i</i> uld be t	<i>indicate parti</i> formed <i>(sped</i>	cular elements below) or said claims Nos. are so unclear ify):	
		the claims, or said claims Nos could be formed.	. are s	o inadequate	ly supported by the description that no meaningful opinion	
		no international search report	has be	en establishe	ed for the said claims Nos.	
2.	or a	A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative nstructions:				
	☐ the written form has not been furnished or does not comply with the Standard.			ot comply with the Standard.		
	☐ the computer readable form has not been furnished or does not comply with the Standard.			ed or does not comply with the Standard.		
٧.	V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability citations and explanations supporting such statement					
1.	Sta	Statement				
	No	velty (N)	Yes: No:	Claims Claims	1-21	
	lnv	entive step (IS)	Yes: No:	Claims Claims	1-21	
	Ind	ustrial applicability (IA)	Yes: No:	Claims Claims	1-8,14-21	

2. Citations and explanations

see separate sheet

#### Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1) Claims 9-13 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Article 34(4)(a)(i) PCT).

#### Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1) US-A-4 588 732 (BROWNE LESLIE J) 13 May 1986 (1986-05-13)[D1], examples 3, 4, 7-10 and US-A-4 617 307 (BROWNE LESLIE J) 14 October 1986 (1986-10-14) [D2], examples 3, 3d-f and 5 disclose compounds and pharmaceutical compositions which differ from the present subject-matter in the the present substituent R<sub>4</sub> which is different from the substituents as mentioned in the relevant examples of D1 and D2.

Accordingly, the present subject-matter is novel with regard to Article 33(2) PCT.

 Since D1 and D2 concern a problem different from the present one they are not relevant with respect to inventive step.

The closest prior art with respect to the question of inventive step is US-A-6 037 349 (SOMBROEK JOHANNES ET AL) 14 March 2000 (2000-03-14) [D3]. D3 discloses imidazopyridines different in its basic structure from the present compounds which are useful in the treatment of aldosteronism, hypertension and cardiac insufficiency. Since the basic structure compared to the closest prior art is quited different it was not predictable that the present compounds could be usefule in the treatment of diseases related to aldosterone synthase activity what could be proved by the applicant for one compound.

Results have been presented only for compounds with  $R_1$  being an aryl radical. However, in view of the fact that  $R_1$  also encompasses cycloalky or heterocyclyl

# INTERNATIONAL PRELIMINARY International application No. PCT/EP 03/12851 EXAMINATION REPORT - SEPARATE SHEET

which are considered to be quite different from anyl although they also cycles, additional test results are required in order to acknowledge an inventive step over the whole scope of  $R_1$ .

Accordingly, for the time being the present subject-matter does not involve an inventive step pursuant to Article 33(3) PCT.

3) For the assessment of the present claims 9-13 on the question whether they are industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.